We Claim:

1. A system for implementing multicast service over a unidirectional signal distribution system having a transmission system adapted to receive multicast packets and transmit said packets using the distribution system, operating in conjunction with an IP multicast router adapted to send multicast packets on demand, and in conjunction with an upstream network capable of transferring data from a subscriber facility, the system comprising:

an order server in communication with said multicast router, and in communication with said upstream network for receiving user input, said order server adapted to receive at least one user request for multicast reception;

said order server adapted to indicate to said multicast router to transmit multicast packets to said transmission system, responsive to at least one user request;

for transmission of said multicast packets by said unidirectional distribution system.

- The system of claim 1 wherein said order server is constructed to receive said
 user requests from at least one set top box located at the user premises and coupled to said upstream network.
- 3. The system of claim 1 wherein said order server is adapted to receive said multicast packets and route them to said transmission system.
- 4. the system of claim 1 wherein said order server is adapted to indicate to the multicast server via an intermediate computer.
- 5. The system of claim 1 wherein said order server further comprises a table adapted receive entries therein, said entries comprising at least one multicast service which at least one user desires to receive, and wherein said entry is remov-

- able from said table, and wherein said table is used to indicate to said multicast router to forward said at least one multicast service.
- 6. The system of claim 3 further comprising a query module, adapted to report which multicast services were requested by users.
- 7. The system of claim 3 wherein said order server is further adapted to remove an entry from said table responsive to a user request transmitted via said upstream network.
- 8. The system of claim 1 wherein said unidirectional distribution system comprises a digital television distribution system.
- 9. The system of claim 1 wherein said order server is adapted to communicate with a transmission system that is connected to a different sub-networks.
- 10. The system of claim1 wherein said order server is adapted to communicate with said transmission system using a virtual private network.
- 11. The system of claim 1 wherein said order server is connected to a first subnetwork, and adapted to connect to a multicast router that is connected to a second sub network.
- 12. The system of claim 1 wherein said transmission system is connected to a first sub network and the multicast router is connected to a second sub-network.
- 13. The system of claim 1 further comprising a virtual private network connecting said transmission system and multicast router.
- 14. The system of claim 1 wherein said order server is integrated into said transmission system.
- 15. The system of claim 1 wherein the functionality of said order server is divided between a plurality of servers.

- 16. The system of claim 1 wherein said upstream network is selected from a group consisting of ISDN network, PSTN network, wired network and wireless network, or a combination thereof.
- 17. A method for multicast transmission via a unidirectional distribution network having a transmission system, and operating in conjunction with a multicast router adapted to send multicast packets of at least one multicast service on demand, the method further operating in conjunction with an upstream network adapted to transfer data from a subscriber facility, the method comprising the steps of:

providing an order server adapted to request transmission of said multicast packets from said multicast router;

allowing a user to deliver orders to said order server from a subscriber via said upstream network, said orders comprise at least a request for transmission of a multicast service;

receiving multicast packets comprising said multicast service, from said multicast router responsive to said user orders;

transmitting data corresponding to said multicast service via said unidirectional network.

- 18. The method of claim 17 further comprising the step of allowing a user to deliver termination order for said multicast service, and terminating the transmission of said multicast service when all orders therefore have been so terminated.
- 19. The method of claim 17 further comprising the step of routing said multicast packets to a television provider network via the network connected to said order server.

- 20. The method of claim 17 wherein said unidirectional distribution network comprises a digital television network.
- 21. The method of claim 17 said upstream network is selected from a group consisting of an ISDN network, a PSTN network, a wired network, a wireless network, or a combination thereof.
- 22. The method of claim 17 further comprising the step of translating Internet Protocol (IP) addresses contained within said multicast packets, into Conditional Access (CA).